

The Development of an OIML International Recommendation for “Automatic Instruments for Weighing Road Vehicles in Motion”

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- Introduction to the Recommendation
- Introduction to OIML
- Development of the Recommendation
- Contents of the Recommendation
- Future Developments
- Conclusions

Introduction to the Recommendation

- Metrological and technical requirements
- Legal metrology
 - Trade purposes
 - Law enforcement
- Total vehicle weighing only
- Inclusion of axle load in future

Introduction to OIML

- International Organisation of Legal Metrology
- World-wide inter-governmental treaty organisation
 - 57 Member States
 - 51 Corresponding Members

Introduction to OIML

- International Recommendations
 - Technical committees and subcommittees
 - Model international regulations
 - Moral obligation to implement into national legislation

Development of the Recommendation

- Why have a Recommendation?
 - International nature of road haulage
 - Increasing interest in use for trade purposes
 - Agreement on metrological and technical requirements

Development Process

- Split Recommendation into two parts
 - Part A - Total vehicle weighing
 - Part B - Axle load
- Part A - changes made to:
 - Structure
 - Metrological content
- Approval September/October 2002

Contents of the Recommendation

- Scope and Application
 - Total vehicle weighing
 - Vehicles weighed in motion
 - Controlled weighing area
 - Vehicle speed controlled

Contents of the Recommendation

- Metrological requirements
 - Accuracy classes
 - Maximum permissible errors (mpes)
 - Instrument configuration

Contents of the Recommendation

- Accuracy classes and mpes

Accuracy Class	Percentage of Mass of Total Vehicle	
	Initial Verification	In-service
0.2	$\pm 0.10 \%$	$\pm 0.2 \%$
0.5	$\pm 0.25 \%$	$\pm 0.5 \%$
1	$\pm 0.50 \%$	$\pm 1.0 \%$
2	$\pm 1.00 \%$	$\pm 2.0 \%$
5	$\pm 2.50 \%$	$\pm 5.0 \%$
10	$\pm 5.00 \%$	$\pm 10.0 \%$

Contents of the Recommendation

- Technical requirements
- Metrological controls and test procedures
 - Type (pattern) evaluation
 - Initial verification
 - Subsequent verification
 - In-service inspection

Future Developments

- Test report format for Part A
- Recommendation to include axle load (Part B)
 - Total vehicle weighing and axle load
 - Traceability of axle load
 - “Accepted reference values”
 - Specification of errors

Conclusions

- Total vehicle weighing (Part A)
 - Splitting Recommendation led to acceptance
 - Consistent application of requirements
 - Recommendation already in use, e.g. SECI
- Part B
 - One Recommendation for total vehicle weighing and axle load